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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,753	11/27/2000	Amir Kantschuk	P-3750-US	3877
27130	7590	05/05/2005	EXAMINER	
EITAN, PEARL, LATZER & COHEN ZEDEK LLP 10 ROCKEFELLER PLAZA, SUITE 1001 NEW YORK, NY 10020			CHANG, EDITH M	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/721,753	Applicant(s) KANTSCHUK ET AL.	
	Examiner Edith M Chang	Art Unit 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-26 are objected to because of the following informalities:

Claim 1 line 3 & Claim 14 lines 3-4: "A of near-end-crosstalk (NEXT) cancellation filters" is suggested changing to "of near-end-crosstalk (NEXT) cancellation A filters"; Claim 1 line 8 & Claim 14 line 7: "as probe filters" is suggested changing to "as P probe filters"; Claim 1 line 11 & Claim 14 line 9: "to at least one target" is suggested changing to "to the at least one target"; Claim 1 lines 12 & 13 and Claim 14 lines 10 & 11: "at least one " is suggested changing to "the at least one"; Claim 1 line 12 & Claim 14 line 10: "NEXT" is suggested changing to "the NEXT".

Claim 3, line 2: "by said candidate disturber modem" is suggested changing to "by the at least one candidate disturber modem among said plurality of modems"; lines 3-4: "among said plurality of modems to which an" is suggested changing to "to which an".

Claims 4 & 17, line 2: "said NEXT" is suggested changing to "the NEXT".

Claims 5 & 18, line 2: "of NEXT" is suggested changing to "the NEXT".

Claims 6-9 & 19-22, line 2: "said modems" is suggested changing to "said plurality of modems".

Claim 10, line 1: "comprising" is suggested changing to "comprising the steps of"; line 2: "said target modem's signal-to-noise ratio (SNR)" is suggested changing to "a signal-to-noise ratio (SNR) of the at least one target modem"; and line 4: "said target modem's SNR once said P probe filter" is suggested changing to "said SNR once when a P probe filter".

Claim 11, line 1: "comprising" is suggested changing to "comprising the steps of"; lines 2-3: "said target modem's signal-to-noise ratio (SNR) and data rate" is suggested changing to "a signal-to-noise ratio (SNR) and a data rate of he at least one target modem"; and line 4: "said target modem's SNR once said P probe filter" is suggested changing to "said SNR once when a P probe filter".

Claims 13 & 26, line 1: "wherein " is suggested changing to "wherein the number of"; line 2: "number" is suggested changing to "is" and "A of NEXT cancellation filters" is suggested changing to "of NEXT cancellation A filters".

Claim 23, line 3: "said target modem's signal-to-noise ratio (SNR)" is suggested changing to "a signal-to-noise ratio (SNR) of the at least one target modem"; and line 5: "said target modem's SNR once said P probe filter" is suggested changing to "said SNR once when a P probe filter"; line 7: "at least one" is suggested changing to "the ate least one"; line 8: "target modem's SNR measured once said P probe filter has reached" is suggested changing to "SNR measured of said P probe filter has once reached"; line 9: "convergence" is suggested changing to "the convergence", "said target modem's SNR" is suggested changing to "said SNR".

Claim 24, lines 3-4: "said target modem's signal-to-noise ratio (SNR) and data rate" is suggested changing to "a signal-to-noise ratio (SNR) and a data rate of he at least one target modem"; and line 5: "said target modem's SNR once said P probe filter has" is suggested changing to "said SNR when said P probe filter has once reached"; line 6: "convergence" is suggested changing to "the convergence"; line 8: "target modem's SNR once said P probe filter has reached convergence" is suggested changing to "said SNR when said P probe filter has once reached the convergence"; line 9: "at least one" is suggested changing to "the at least one"; line

Art Unit: 2637

10: “if data rate estimated in said target modem’s SNR measured once” is suggested changing to “if the data rate estimated in said SNR measured when”; line 11: “has reached convergence” is suggested changing to “has once reached the convergence”, “said target modem’s SNR” is suggested changing to “said SNR”.

Claim 25, line 2: “estimating target modem’s” is suggested changing to “estimated”; line 3: “said target modem’s SNR once said P probe filter has reached convergence” is suggested changing to “said SNR when said P probe filter has once reached the convergence”; line 4: “target modem’s SNR measured once said P probe filter has reached convergence” is suggested changing to “SNR measured when said P probe filter has once reached the convergence” and line 5: “said target modem’s SNR” is suggested changing to “said SNR”.

Claims 2, 12 and 15-16 are dependent on the objected claims 1 and 14.

Appropriate correction is required.

### ***Allowable Subject Matter***

2. Claims 1-26 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

3. The following is an examiner’s statement of reasons for allowance:

The prior art of record does not teach or suggest, alone or in a combination, among other things, at least a method for NEXT cancellation filter allocation and its communication system having a modem pool being operative as a whole, the combination of elements and features as claimed, which includes allocating P ( $P \geq 1$ ) filters among a plurality A of NEXT cancellation filters as probe filers, allocating at least one of the remaining A-P filters to cancel NEXT, and

Art Unit: 2637

measuring NEXT impairment caused to at least one target modem by at least one candidate disturber modem to which no A-P filter is allocated.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. This application is in condition for allowance except for the following formal matters: Listed in the claim objections of this office action.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

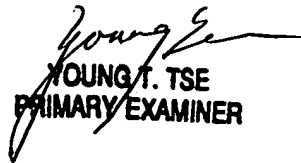
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edith M Chang whose telephone number is 571-272-3041. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2637

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edith Chang  
April 25, 2005

  
YOUNG T. TSE  
PRIMARY EXAMINER